

Construction Industry Communication #29

From: Amit Ghosh, Chief Building Official
RE: Temporary Structure Procedures (to be used less than 180 days)
Date: February 8, 2019

Background:

The Ohio Building Code, the Ohio Fire Code and the Columbus City Code regulate temporary structures such as tents over 400 square feet, and stages over 400 square feet or over 12" from grade. The term 'temporary structure' may also refer to membrane covers and platforms if a person may be under or on them. Plan approval and inspections are required by both the Department of Building and Zoning Services and the Columbus Division of Fire.

Temporary Structures can be broken down into two types of permits:

Commercial/Private/Gated

Temporary structures, utilized for less than 180 days, for the purpose of sales promotions, advertising displays, and additional capacity for restaurants and bars are considered commercial permits. Private or gated events are those where access is restricted to invitation only or when a participation fee, ticket or donation is required to access all or part of an event site and are considered commercial permits.

Commercial/Private/Gated permits are subject to full building permit and inspection fees as defined in the current Combined Development Related fee schedule.

Public Festival

Public festivals or special events are free and open to the public for five (5) consecutive days or less and utilize temporary structures or electric services.

Festival permits are subject to the Festival fee as defined in the current Combined Development Related fee schedule.

What Needs a Building Plan Review and Inspection

- Individual tents greater than 400 square feet
- Tents with side panels grouped in an aggregate area of over 400 square feet without a fire break
- Tents without side panels grouped in an aggregate area of over 700 square feet without a fire break
- Platform stages over 400 square feet or more than 12 inches off the ground
- Stage canopies greater than 400 square feet
- Other temporary structures

Exceptions

- An approval is not required for tents used exclusively for recreational camping purposes
- An approval is not required for tents open on all sides which comply with all of the following:
 - Individual tents having a maximum size of 700 square feet
 - The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet, not exceeding 700 square feet total
 - A minimum clearance of 12 feet to all structures and other tents.

What Needs an Electrical Review and Inspection

An electrical permit is required when the lighting and power is hard-wired (new service and panel are being installed) or lighting and power are being supplied by vehicle or trailer mounted generator.

- When an electrical permit is required, the electrical contractor must be registered with the City of Columbus.
- *Electrical inspections are required for electrical permits.*

An electrical permit is **not** required when electric power is plugged into permanently mounted existing exterior GFCI receptacles or connection is made to a small portable generator that does not utilize distribution panels.

Public Festivals that do not feature temporary structures but do require an electrical permit will be required to obtain an electrical permit at the Festival fee prescribed in the current Combined Development Related fee schedule.

Application

- Site address, parcel number, and event name clearly written on application
- Project description to include set up, tear down, and run dates; number of tents and size of tents over 400 square feet; size and height above ground for stages; stage canopies over 400 square feet

Documentation

(2) Copies of detailed Site Plan dimensioned to scale to include the following:

- Boundary of event and property lines
- Location of tents, stages and other temporary structures with dimensions and use
- The distances between all existing structures and temporary structures
- Location of sanitary facilities within 500 feet; show location of portable toilets
- Location of outdoor seating or standing with indication of fixed seating, tables and chairs
- Location of fencing to include type, height, gate locations, and method of anchoring
- Indicate the access and egress for overall event site; indicate location and widths of exits
- Location of cooking or open flame both outside and inside of tents; tents used for cooking shall be separated from all other tents, canopies and structures by at least 20 feet. Equipment used for cooking shall not be located within 10 feet of an exit or combustible materials.
- Location and separation of mobile food vendors and any cooking operations
- Location of all fuel stations; show the location of propane tanks

- Location of generators with dimensions of separation between tents and the public
- Fire department access within 150 feet
- Indicate 20 foot fire lane to be maintained within the entire event area
- Location of fire hydrants and fire department connections
- Indicate that means of egress (exits) from existing structures are clear during the event
- Indicate evacuation routes
- Indicate limited access when temporary structure is located in a space with limited access such as under a roof or within a courtyard; must verify that adequate egress will be available
- A handicap accessible route to the tent (not required for private events)

(2) Copies of Construction documents to include:

- Flame resistant certificate for each size of tent and each size of stage canopy
- Manufacturer's specifications and installation instructions for each size of tent and stage
- Stage details for stairs (riser height and tread depth), handrails, and guardrails

(2) Copies of tent floor plans to include:

- If there are side panels on the tent, indicate location
- If more than two side panels, indicate exits, exit widths, posted exit signs, and paths of travel
- Anchoring locations and information; installer must verify the tie-down is capable of resisting an uplift of at least 10 pounds per square foot of horizontal tent area
- Plans must include a note instructing the occupants to evacuate the tent(s), if necessary, when wind speed meets or exceeds 40 MPH
- Seating layout showing number, size, and location of tables; number of chairs; aisle widths of at least 36"
- Indicate fixed seating, standing room or un-concentrated tables and chairs
- Location of fire extinguishers, cooking, heating and electrical equipment
- Size and location of all LP gas equipment and storage containers
- Proposed occupant load:

$$\text{occupant load} = \frac{\text{area (in square feet)}}{\text{occupant load factor}}$$

Occupant Load Factors

- Assembly – concentrated use (chairs only, not fixed) = 7
- Assembly – unconcentrated use (tables and chairs) = 15
- Assembly – standing room only = 5
- Mercantile = 30
- Provide minimum number of exits and exit widths
 - For occupant loads between 10 and 199, 2 exits are required with minimum widths of 72 inches each for tents and 36 inches each for membrane structures.
 - For occupant loads between 200 and 499, 3 exits are required with minimum widths of 72 inches each for tents and membrane structures.
 - For occupant loads between 500 and 999, 4 exits are required with minimum widths of 96 inches each for tents and 72 inches each for membrane structures.
 - For occupant loads between 1,000 and 1,999, 5 exits are required with minimum widths of 120 inches each for tents and 96 inches each for membrane structures.
 - For occupant loads between 2,000 and 2,999, 6 exits are required with minimum widths of 120 inches each for tents and 96 inches each for membrane structures.

- For occupant loads of 3,000 and greater, 7 exits are required with minimum widths of 120 inches each for tents and 96 inches each for membrane structures.
- The total width of all exits shall not be less than the total occupant load multiplied by 0.2 inches per person. Exiting through other structures is not an acceptable configuration.
- Indicate minimum number of fire extinguishers
 - Portable fire extinguishers shall be located at every 75 feet of travel distance. The travel distance between portable fire extinguishers is not to exceed 75 feet.
 - For temporary structures between 1 and 200 square feet, 1 portable fire extinguisher is required.
 - For temporary structures between 201 and 500 square feet, 2 portable fire extinguishers are required.
 - For temporary structures between 501 and 1,000 square feet, 3 portable fire extinguishers are required.
 - For temporary structures between 1,001 and 3,000 square feet, 4 portable fire extinguishers are required.
 - For temporary structures between 3,001 and 5,000 square feet, 5 portable fire extinguishers are required.
 - For temporary structures between 5,001 and 7,000 square feet, 6 portable fire extinguishers are required.
 - For temporary structures between 7,001 and 9,000 square feet, 7 portable fire extinguishers are required.
 - For temporary structures between 9,001 and 11,000 square feet, 8 portable fire extinguishers are required.
 - For each additional 2,000 square feet or fraction thereof, add one additional portable fire extinguisher.

Inspections

It is the responsibility of the permit holder to ensure inspections are requested and performed prior to occupancy or start of the event.

Building and Zoning inspections requested Monday through Friday prior to 4pm will be conducted the next business day. After hours inspection requests should be requested as soon as the inspection date is known to ensure staffing levels. After hour inspection requests must be made prior to 1:30 pm the previous business day.

Inspections can be requested on-line at <https://www.columbus.gov/bzs/inspections-request> or by phone at 614-645-8235.